Symposium on Climate Change and the Interpretive Social Sciences & Humanities

DOES PARIS MAKE A DIFFERENCE?

ANTHROPOGENIC CLIMATES & GLOBAL ORDER

This symposium is jointly organized by the Science, Technology & Society (STS) Clusters at Asia Research Institute, and Faculty of Arts and Social Sciences, National University of Singapore.

Date	**5 April 2016 (Tuesday)**
Time	**9:30 am - 4:00 pm**
Venue	**CNM Playroom | AS6, #03-38** Faculty of Arts and Social Sciences, National University of Singapore 11 Computing Drive, Singapore 117416

A new legal agreement for tackling climate change was agreed to by the global community in Paris last November. In the meantime, critical social sciences and humanities have long been exploring interpretive dimensions of climate change and its different possible worlds. What insights do the interpretive human sciences bring to bear on the anthropogenic climate and the global orders it has engendered? Does Paris make a difference for our understanding of climate change and society? Fundamental questions hinge on our epistemic capacities to model and predict. And yet the *in vivo* experiment of annually pumping billions of tons of carbon into the atmosphere continues to outstrip and out-perform our meager imagination of climate change futures. This past year, 2015, was likely the last year that atmospheric carbon dioxide will ever drop below 400 parts-per-million for the indefinite future. As we ask if Paris makes a difference, we may wonder whether anthropogenic climates leave any hope of global order.

REGISTRATION

Due to limited seats. We would gratefully request that you RSVP to fasssts@nus.edu.sg indicating your name, organization, and email address.

CONVENOR

Dr Jerome Whitington
Asia Research Institute & Tembusu College, National University of Singapore
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5 APRIL 2016, TUESDAY	
09:30 – 10:00	**WELCOME & INTRODUCTORY REMARKS**
	Jonathan Rigg | *Asia Research Institute & Department of Geography, NUS* **Jerome Whitington** | *Asia Research Institute & Tembusu College, NUS*
10:00 – 11:30	**PANEL 1 – GEOLOGY OF MANKIND**
Chairperson	**Lee Zhe Yu** | *Tembusu College, NUS*
10:00	**When All That is Urban Melts into Air: Concrete and Climate Change after Paris** **Eli Elinoff** | *Asia Research Institute & Department of Sociology, NUS*
10:20	**The Indefinite Future: Accounting for Atmosphere before Paris** **Jerome Whitington** | *Asia Research Institute & Tembusu College, NUS*
10:40	**The Anthropocene and the Limits of Experience: Or Why It is So Hard to be Human in the 'Geology of Mankind'** **Mabel Wong** | *University Scholars Programme, National University of Singapore*
11:00	QUESTIONS & ANSWERS
11:30 – 1:00	**LUNCH** (Will not be provided for)
1:00 – 2:10	**PANEL 2 – GLOBAL ORDERS**
Chairperson	**Jerome Whitington** | *Asia Research Institute & Tembusu College, NUS*
1:00	**How Not to Talk About Climate Change** **Matthew Lepori** | *Department of Political Science, NUS*
1:20	**Prospects for Alternative (Agrarian) Modernities in the Age of Capitalist Natures** **Lee Zhe Yu** | *Tembusu College, NUS*
1:40	QUESTIONS & ANSWERS
2:10 – 2:30	**TEA BREAK**
2:30 – 3:40	**PANEL 3 – IMAGINATIVE FUTURES**
Chairperson	**Matthew Lepori** | *Department of Political Science, NUS*
2:30	**Climate Models and the Limits of the Anthropocenic Imagination** **Axel Gelfert** | *Department of Philosophy, NUS*
2:50	**Blue Skies: Readiness in the Anthropocene** **Eric Kerr** | *Asia Research Institute & Tembusu College, NUS* **Malini Sur** | *Asia Research Institute, NUS*
3:10	QUESTIONS & ANSWERS
3:40 – 4:00	**SUMMARY AND CLOSING REMARKS**
	Jerome Whitington | *Asia Research Institute & Tembusu College, NUS*
4:00	**END OF SYMPOSIUM**

PANEL 1 - GEOLOGY OF MANKIND

The Anthropocene and the Limits of Experience: Or Why It is So Hard to be Human in the 'Geology of Mankind'

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This paper is a first attempt at making *sense* of the Paris agreement. In phenomenology, sense refers to the process of meaning-making that inheres in our embodied experiences of the world. To make sense of something is to engage in a set of embodied practices that orient the body towards a meaningful perception of the thing. Making sense of the agreement thus entails an examination of the meaning-making relationship between our body and the environment. It involves asking how the dangers of climate change and solutions proposed become meaningful at the level of embodied experience. This question is, however, deeply problematic because of the dissonances between the bodily scales of such a level and the magnitudes of a phenomenon that vastly exceed them. Making sense of the Paris agreement is thus a way to begin exploring the possibility of a phenomenological account of our current climate conditions and the implications such an account might have for environmental politics and ethics.

When All That is Urban Melts into Air: Concrete and Climate Change after Paris

Eli Elinoff | Asia Research Institute & Department of Sociology, NUS
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In the wake of the historic Paris agreement on climate change, the cement industry set a target of reducing its greenhouse gas emissions by 25 percent by 2030. Such actions are not negligible given that the cement industry accounts for an estimated five percent of greenhouse gas emissions per year. In this presentation, I explore the role that cement plays in contemporary debates surrounding global climate change. To do so, I describe out the varied roles the material plays in making the Anthropocene city. I argue that while cement manufacturers seem to have embraced the post-Paris challenge, the material politics of cement and concrete are more vast and complicated than simple emissions calculations often account for. Drawing from ongoing fieldwork in Thailand related to the urban environment, I sketch the murky web of social relations that mobilize this fundamental material of urbanization. In addition to describing the basic ways the cement industry reckons its impacts, I also describe several other axes upon which cement is injected into the environment. These include: calcination, carbonation, assembly, and corrosion. When cast in their broader social and political net, these processes and the sets of relations that move cement into the urban environment reveal that a more complex and situated rendering of concrete's role in the urban environment is necessary if we are to reimagine the materiality and its manifestations in the city for an era of dramatic environmental change.

The Indefinite Future: Accounting for Atmosphere before Paris

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We stand before Paris as we stand before the law, and before the singular fact of small but persistent changes in atmospheric carbon. In 1959, Charles Dave Keeling was able to demonstrate a systematic, quantitative rise in global, atmospheric carbon, a singular scientific feat that made clear that global warming was no mere scientific speculation on a hypothetical scenario. Instead, the hypothesis of anthropogenic climate change was a real historical potential, an *in vivo* experiment in what possible forms a human planetary ecology might take. The United Nations accords, beginning with the Framework Convention on Climate Change in 1992 and culminating

in the Paris Agreement, represent just as bold an experiment. This global regime attempts to establish a basis for managing the chemical composition of the planetary ecology. Was this achieved in Paris? Accounting for atmosphere—the quantitative work of carbon accounting—grants the subjects of climate change a provisional glimpse of an unknown future. Again and again, observers of the Paris Agreement claim that this law, which is not quite a law, is only a beginning—that all the work remains to be done and what matters now is the good use to which people now and in the future put it. Finally, this past year, 2015, was likely the last year, for the indefinite future, when atmospheric carbon will ever be below 400 ppm. The tense of the Anthropocene might be exactly that—the indefinite future.

PANEL 2 – GLOBAL ORDERS

How Not to Talk About Climate Change

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The Anthropocene threatens to become the primary reference by which we understand the present day as it pertains to the global ecology. Through an all-encompassing rhetoric paired with a catastrophist imaginary, the Anthropocene pushes a new universal history and subject. Representing a crystallization of ecological thought and activism, the term pronounces a We subject—the anthropos—that has threatened its object to the point that this object, Nature (or in the parlance, the "Earth system"), may no longer come to tolerate it. The concept seduces the reader through its direct and damning injunction against "business as usual," declaring that humans must take responsibility for its actions or face sure catastrophe. Though this rhetoric is effective for drawing attention to the ecological crisis, raising the alarm over the state of the atmosphere and global biodiversity, the term is equally dangerous as a matter of social theory. By generalizing responsibility and guilt for our contemporary ecological disasters to the point that it encompasses the human species, the Anthropocene concept and discourse elide a history of asymmetrical political economic relations. In a global order marked by new powers that do not accept this historical narrative, narrating climate change through this concept may be ultimately self-defeating.

Prospects for Alternative (Agrarian) Modernities in the Age of Capitalist Natures

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In my presentation, I will reflect on my past experiences as a NGO participant at various UN climate change negotiations (including Copenhagen) and suggest that the current institutional framework remains inadequate in meaningfully addressing despite purported success of the Paris deal. By historicizing the political processes that led to the emergence of the broader global sustainable development and environmental governance framework over the last 40 years, it becomes clear that the persistent dominance of technocratic incrementalism comes as no surprise. Given the limited effectiveness of top-down multilateral and nation-state oriented policymaking processes in catalyzing adequate and just solutions to climate change, I will briefly discuss the potential for agrarian social movements and struggles for food sovereignty to realize alternative modernities during this age of the anthropocene. With the contemporary ubiquity of apolitical discourses of "sustainability" and technoscientific environmental knowledge regimes reinforcing mainstream economic logics (e.g. "green growth"), I identify key challenges specific to Southeast Asia that need to be overcome if radically different socio-ecological trajectories during this post-Paris era are to come to fruition.

PANEL 3 – IMAGINATIVE FUTURES

Climate Models and the Limits of the Anthropocenic Imagination

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The Paris agreement marks the global acceptance, at least on paper, of the need to limit anthropogenic climate change to severe, but non-dangerous, levels. It also, implicitly, marks the acceptance of climate models and their predictions, which are often interpreted as indicating that a 2 degree Celsius rise in average global temperature would have irreversible, but just about tolerable consequences. The empirical adequacy of numerical climate models has improved vastly in recent years and various models have been shown to display considerable convergence on the core principles and predictions associated with climate change. In recent years, however, a number of climate scientists and a handful of policymakers have voiced a worry: in the quest for numerical stability and convergence, have climate models discounted the possibility of catastrophic climate trajectories? While these are low-probability scenarios, given our incomplete knowledge about "tipping points" these remain very real possibilities. Standard climate models may not adequately reflect these and, therefore, may limit the scientific imagination of climate futures in the age of the Anthropocene. In my talk, I will provide a brief sketch of the debate about tipping points and will discuss how the growing recognition of the possibility of catastrophic climate change has influenced scientists and (some) policymakers in the run-up to the Paris agreement.

Blue Skies: Readiness in the Anthropocene

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This paper explores what it means to be ready for the future in an Anthropocenic age. Although future-readiness and future-proof derived from engineering in the 1980s and 1990s as responses to rapid technological change, these expressions are now widely used to talk about environmental policies, sustainability, and everyday life. Being ready rests on adaptability and versatility in the face of indeterminate futures; having the capacity and foresight to switch at a moment's notice to meet unpredictable challenges. Readiness connotes being assemblable and dis-assemblable, modular and reconfigurable, modifiable and readily appropriated for human and technological ends. As technological readiness increasingly shapes the ways in which futures are imagined, we ask how the tensions between the readiness of humans and the disruptive nature of technologies are reconciled. In this paper we will explore a recent exhibition in Singapore entitled 'The Future of Us,' (December 2015 - March 2016) situated within three purpose-built domes adjoining the Gardens by the Bay. Whilst the underlying theme of the exhibition was an adaptable readiness for an uncertain future, we propose to show how readily-available technologies afford specific contours to imagined futures, and how sustainability and 'climate readiness' is constructed from within these crystal domes.

ABOUT THE SPEAKERS

Axel Gelfert is Assistant Professor in the Department of Philosophy, National University of Singapore. He completed his PhD in History and Philosophy of Science at the University of Cambridge in 2005, having previously studied Physics at the Humboldt University in Berlin and the University of Oxford. Before coming to Singapore, he held a Junior Fellowship at Collegium Budapest (Institute for Advanced Study) in Hungary, where he also guest-lectured in the Department of Philosophy and History of Science (Budapest University of Technology and Economics). In the summer of 2009, and again in 2011, he was a Visiting Research Fellow at the Institute for Advanced Studies in the Humanities, University of Edinburgh. His research and teaching revolve around issues in the philosophy of science and technology, social epistemology, and the history of philosophy.

Eli Elinoff is currently a joint Postdoctoral Fellow in Asian Urbanisms in the National University of Singapore's Department of Sociology and the Asia Research Institute. He received his PhD in Anthropology from the University of California, San Diego. He is currently working on a book manuscript that explores questions of democracy, citizenship, and urban sustainability through an ethnographic examination of new forms of participatory planning and historical struggles over land rights in Khon Kaen, Thailand. He has publications in South East Asia Research, Political and Legal Anthropology Review, and Contemporary Southeast Asia. He has also begun new research on urban ecologies and concrete in contemporary Thailand.

Eric Kerr is Postdoctoral Research Fellow in the Science, Technology & Society cluster at the Asia Research Institute, Lecturer in the Department of Philosophy, and Fellow of Tembusu College, National University of Singapore. He writes primarily on the philosophy of technology and epistemology, with a focus on petroleum engineering. He is currently working on issues of risk, safety, expertise, responsibility, evidence, artefacts, perception and cognition based on his philosophical research and fieldwork with engineers in Thailand. Eric received his PhD from the University of Edinburgh in 2013 and has been a visiting researcher at the University of Vienna and TU Delft.

Jonathan Rigg is Director of the Asia Research Institute and Professor in the Department of Geography at the National University of Singapore. Prior to that, he was Head of the Geography Department at Durham University in the UK. He was also based at the School of Oriental & African Studies, London University where he was a Lecturer, British Academy Post-Doctoral Research Fellow, and PhD student. He is a development geographer interested in illuminating and explaining patterns and processes of social, economic and environmental change in the Asian region and the impacts of such changes on ordinary people and everyday life. In his work, he has tried to give a "face" to the individuals buffeted by modernisation and ascribe to them an agency which is sometimes absent in higher level interpretations of change. He has been concerned to treat ordinary people as special and the geographical contexts in which they live – and which they help to shape – as distinctive. He is currently working on three projects: an international, interdisciplinary study of resilience to earthquake risk in the continental interior of Asia; a study of the role of land in agrarian change in Thailand; and a project on the survival of the smallholder in East and Southeast Asia. His latest book *Challenging Southeast Asian Development: The Shadows of Success* was published in August 2015.

Jerome Whitington has a joint appointment as a Fellow of Tembusu College and a Research Fellow in the Science, Technology, and Society Cluster of the Asia Research Institute. His book project — *Accounting for Atmosphere: Climate Change, Quantification and the Second Life of Carbon* — studies emerging regimes to manage the chemical composition of the atmosphere. He recently edited *Climate Transformations*, a special issue of the Political and Legal Anthropology Review (PoLAR), forthcoming in May. An anthropologist, he formerly held positions at Dartmouth College and the New School University in the United States, and has lived for six years in Thailand and Laos.

Lee Zhe Yu is currently working at Tembusu College, NUS as part of the conference secretariat preparing for the annual meeting of the Society for the History of Technology that will be held in June 2016. He obtained a BA with double majors in geography and environmental studies from Macalester College in May 2015. He has interests in a broad range of development and environmental issues from a critical, qualitative social science standpoint and will be starting at the MS program in geography at the University of Wisconsin-Madison this coming Fall focusing on interrogating logics of agrarian and forestry change in Southeast Asia through the interlinked lens of political ecology, critical development studies and science and technology studies. Zhe Yu hopes to explore how social processes surrounding postcolonial nation-building, Cold War ideological contestation and the scientization of environmental/economic knowledges have led to the emergence of modes of subject formation and institutionalization of technocratic governance regimes that allow for neoliberal developmentalist visions to persist. Outside academia, he has interned for organizations such as NUS Press, Rainforest Action Network and the Institute of Agriculture and Trade Policy and has attended various United Nations sustainable development and climate change meetings.

Mabel Wong is a Lecturer at the University Scholars Programme, National University of Singapore. She is a political theorist whose research usually centers on the notions of identity, community, and political attachment from a phenomenological perspective. Like everybody else, she is now forced to grapple with the realities of our current climate conditions and is trying to figure out what her training might bring to bear on them.

Malini Sur is a Research Fellow with the Asia Research Institute, National University of Singapore and member of the Asian Migration cluster since 2015. Her research interests connect three broad areas—borders, mobility, and citizenship—with a focus on South Asia. She has lectured at the University of Amsterdam and held a postdoctoral fellowship at the University of Toronto. Malini has published in anthropology and interdisciplinary journals including *Comparative Studies in Society and History* (forthcoming), *HAU*, *Mobilities, Indian Journal of Gender Studies and the Economic* and *Political Weekly*. She has co-edited a collection of ethnographic essays on migration entitled *Transnational Flows and Permissive Polities* (Amsterdam University Press, 2012).

Matthew Lepori is a Postdoctoral Fellow at the Department of Political Science, National University of Singapore. He received his PhD from the University of Massachusetts Amherst in 2015. His research interest includes the contemporary political theory; the political economy of food, agriculture, and environment; global environmental politics. He is particularly interested in the ways in which green and localist political thinking depict the political economy, and the politics of climate change.